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PATENT APPLICATION
27866/37317

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Application of: Colin D. MacCalman

Serial No.: 09/830,811

Filed: April 27, 2001

For: Cadherin-11 Expression, an Assay and Treatment for Cellular Invasiveness

Group: 1635

Examiner: Sean R. McGarry

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

May 17, 2004

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Greta E. Noland

Greta E. Noland

AMENDMENT AND RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is in response to the Office Action mailed on November 17, 2003 in the above-identified application. In the Action, claims 1-5, 9-13 and 17-19 were variously rejected under 35 U.S.C. §112, first paragraph, and §101 Reconsideration of the rejections is respectively requested in view of the following amendment and remarks.

Amendment

Please amend the application as follows.

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Amendment to the Specification

Replace the paragraph spanning page 2, line 31 through page 3, line 7 with the following.

Type 2 cadherins show low overall amino acid homology with classical cadherins. The type 2 cadherins share common sequence features, such as characteristic amino acid deletions or additions and distinctive amino acid substitutions at various sites, which are not found in classical cadherins. In particular, type 2 cadherins do not contain the cell adhesion recognition (CAR) sequence, HAV, which is conserved among all the classical cadherin subtypes. Cadherin-11 (cad-11), also known as OB-cadherin (OB-cad), is a type 2 cadherin which appears to play a central role in morphogenesis. [See United States Patent No. 5,597,725 issued January 28, 1997, incorporated herein; and, Takeichi, M. (1995) "Morphogenetic Roles of Classical Cadherins", *Curr. Opin. Cell. Biol.* 7: 619-627. The DNA and amino acid sequences of cad-11 are respectively set out in SEQ ID NOs: 57 and 58 of United States Patent No. 5,597,725 and are respectively reproduced herein in SEQ ID NOs: 5 and 6.]

Replace the paragraph at page 22, lines 9-21 with the following.

Antisense oligonucleotide sequences (18 mers, 50% AT/GC) were selected from the full-length cad-11 cDNA sequence (SEQ ID NO: 5) using the MacVector™ program. DNA sequences located near the 5' prime end of the cad-11 cDNA were selected and compared to the human sequence databases of GenBank and EMBL bank. Two sequences, which showed low homology (41.5%) with other known human DNA sequences were identified: OB-1 and OB-2 as shown in Table 1. Sense oligonucleotides, OB-3 and OB-4 were prepared as controls. Phosphothiorate labelled oligonucleotides were prepared at the Biotechnology Lab. of The University of British Columbia. The same results were obtained using OB-1 and OB-3, as with OB-2 and OB-4.